LineUp With Math™ Alignment
Arkansas Mathematics Curriculum Framework

Strand: Number and Operations

Standard 1. Number Sense

Student Learning Expectation	***LineUp With Math™* Activities**
NO.1.6.1 Demonstrate conceptual understanding to find a specific percent of a number, using models, real life examples, or explanations.	--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

Standard 3: Numerical Operations and Estimation
Students shall compute fluently and make reasonable estimates

Student Learning Expectation	***LineUp With Math™* Activities**
NO.3.6.6 Use proportional reasoning and *ratios* to represent problem situations and determine the reasonableness of solutions with and without appropriate *technology* (Ex. unit *rates*)	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.
NO.3.6.7 Determine the *percent* of a number and solve related problems in real world situations Ex. tip, sales tax, discounts, etc	--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

Strand: Algebra

Standard 7: Analysis of Change
Students shall analyze change in various contexts

Student Learning Expectation	***LineUp With Math™* Activities**
A.7.6.1 Identify and compare situations with constant or varying *rates* of change Ex. a student's rate of growth each year is a varying rate, hourly wages is a constant rate	--Identify and resolve distance, rate, time conflicts in air traffic control problems by varying plane speeds or changing plane routes.

Strand: Measurement

Standard 12: Physical Attributes
Students shall use attributes and tools of measurement to describe and compare mathematical and real-world objects

Student Learning Expectation	***LineUp With Math™* Activities**
M. 12.6.2 Make conversions within the same	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

measurement system in real world problems Ex. hours to minutes to seconds, meters to centimeters, feet to inches, liters to milliliters, quarts to gallons, etc	
Standard 13: Systems of Measurement **Students shall identify and use units, systems and processes of measurement**	
Student Learning Expectation	***LineUp With Math™* Activities**
M.13.6.1 Solve real world problems involving one *elapsed time*, counting forward and backward (calendar and clock)	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
M.13.6.6 Use estimation to check the reasonableness of measurements obtained from use of various instruments (including angle measures)	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Strand: Data Analysis and Probability	
Standard 16: Inferences and Predictions **Students shall develop and evaluate inferences and predictions that are based on data**	
Student Learning Expectation	***LineUp With Math™* Activities**
DAP.16.6.1 Use observations about differences in data to make justifiable inferences	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.